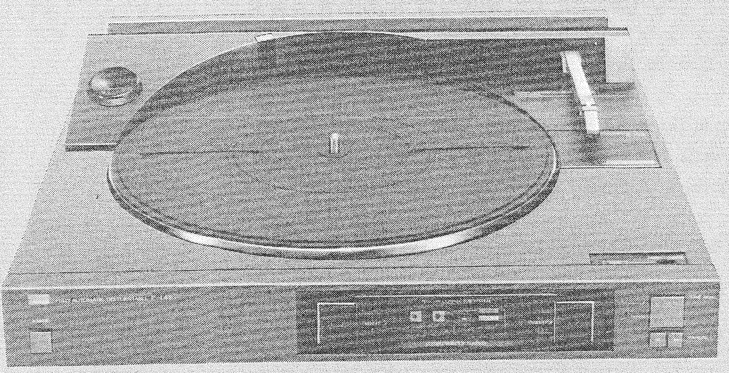
SERVICE MANUAL

FULLY AUTOMATIC DD TURNTABLE

SANSUI P-L41

(Silver & Black Model)



CAUTION

1. Parts identified by the ⚠ symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

Sansui

SANSUI ELECTRIC CO., LTD.

•SPECIFICATIONS

Type	Direct-drive turntable
Rated speeds	33-1/3, 45 rpm
Platter	Aluminum alloy diecast, 306 mm (12-1/16") diameter, 0.6 kg (1.3 lbs.) weight
Motor	Coreless and Brushless DC/FG Servo
Wow/flutter	0.028% (WRMS)
Signal-to-noise ratio	Better than 72 dB (DIN-B) Better than 60 dB (IEC-B)
Tonearm	Statically-balanced type
Effective tonearm length	142 mm (5-5/8")
Power voltage	110 ~ 120/220 ~ 240V (50/60 Hz)
For U.S.A. and Canada	120 V (60 Hz)
Power consumption	17 W
Dimensions	430 mm (16-29/32") W 114 mm (4-1/2") H 373 mm (14-11/16") D
Weight	6.9 kg (15.2 lbs.) net 8.2 kg (18.1 lbs.) packed

Specifications of the cartridge (applicable only to the units with cartridge)

Model SV-P515

Type	Dual Magnet type
Output voltage	2.5 mV (1,000 Hz, 35.4 mm/sec)
Correct load impedance	47 kohms
Frequency response	10 ~ 20,000 Hz
Stylus	0.6 mil diamond stylus (SN-P515 replacement stylus)

* Design and specifications subject to change without notice for improvements.

CAUTION

1. The symbols, UL, CSA, SA, BS, UK, EU, AS and XX (EXPORT) on the parts list and the schematic diagram mean followings respectively.

UL....................... Manufactured for U.S.A market.
(Underwriters Laboratories approved model.)
CSA.................... Manufactured for Canadian market.
SA....................... Manufactured for South African market.
BS, UK .... Manufactured for United Kingdom market.
EU .... Manufactured for European market.
AS....................... Manufactured for Australian market.
XX (EXPORT)..... Standard Version.
NON MARK........ Common Parts.

2. Some printed circuit boards are not supplied as the assembled. To separate these in this service manual, the stock No's are not indicated at the ends of the board names. However, the individual parts on the circuit boards are provided by orders.

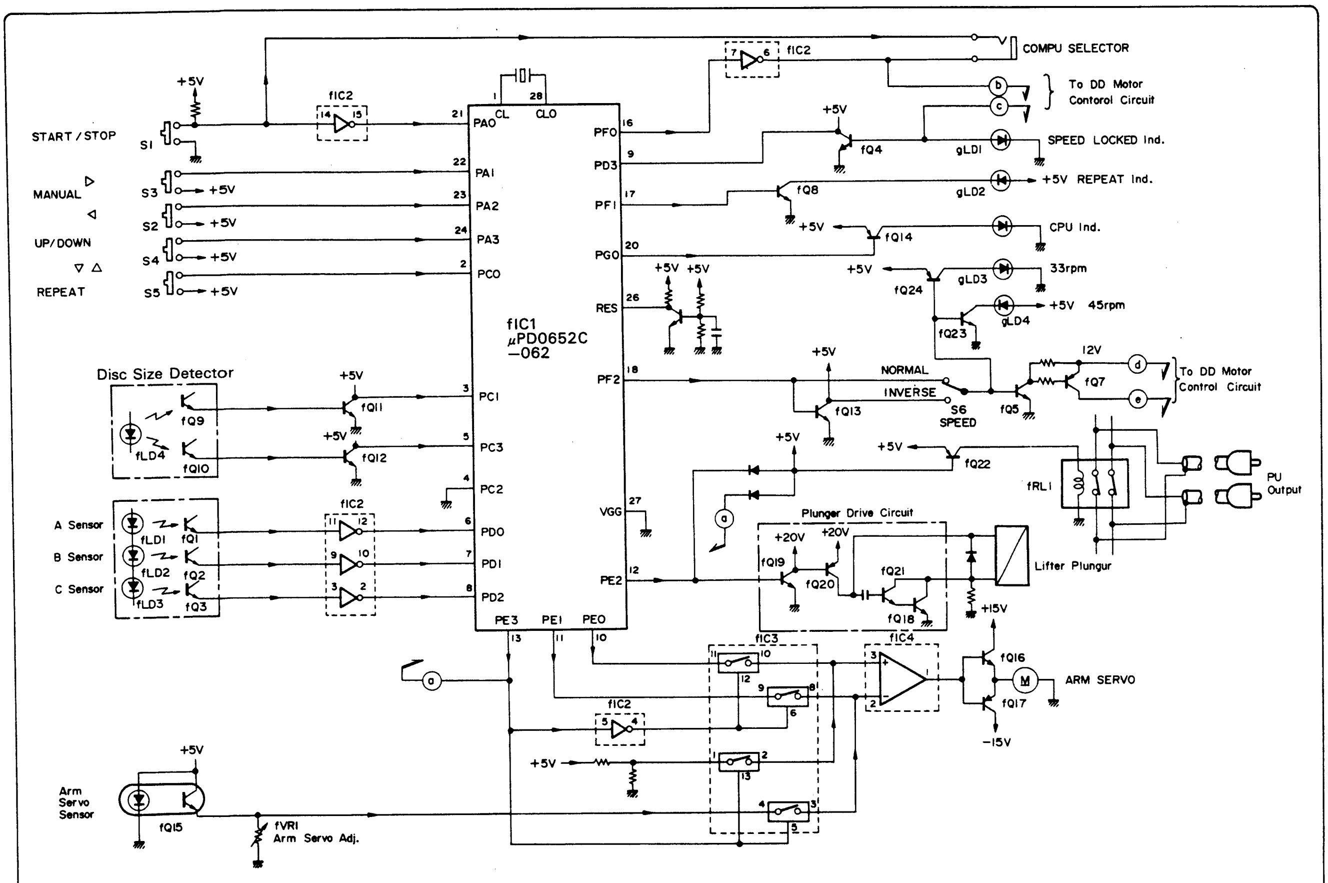
3. Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.

4. Abbreviations in this service manual are as follows.

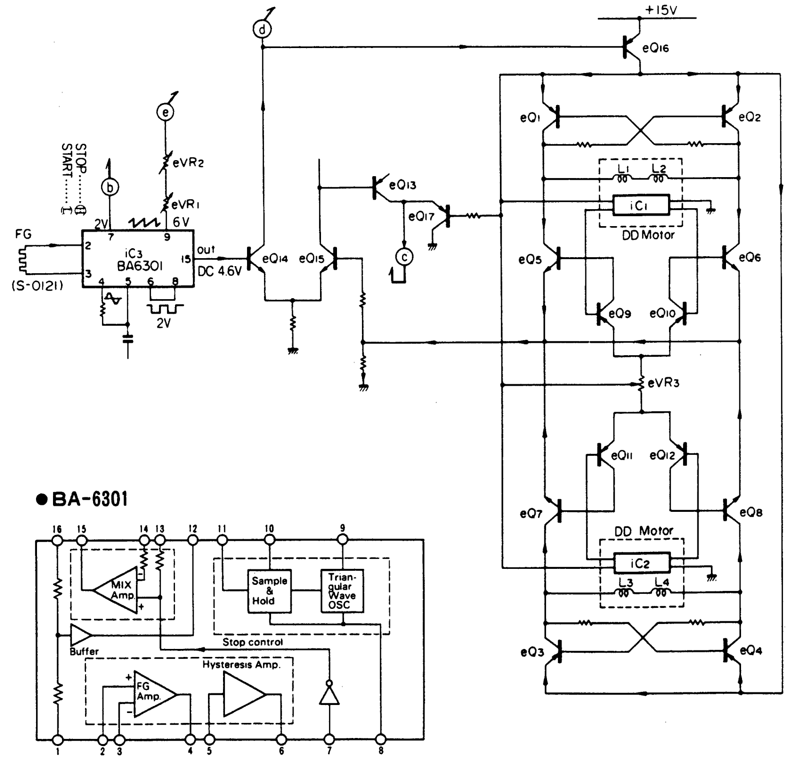
•Abbreviations List

C.R. : Carbon Resistor
S.R. : Solid Resistor
Ce.R. : Cement Resistor
M.R. : Metal Film Resistor
F.R. : Fusing Resistor
N.I.R. : Non-Inflammable Resistor
A.R. : Array Resistor
C.C. : Ceramic Capacitor
C.T. : Ceramic Capacitor, Temoerature Compensation
E.C. : Electrolytic Capacitor
E.L. : Low Leak Electrolytic Capacitor
E.B. : Bi-Polar Electrolytic Capacitor
E.B.L. : Low Leak Bi-Polar Electrolytic Capacitor
Ta.C. : Tantalum Capacitor
F.C. : Film Capacitor
M.P. : Metalized Paper Capacitor
P.C. : Polystyrene Capacitor
G.C. : Gimmic Capacitor
A.C. : Array Capacitor
V.R. : Variable Resistor
S.V.R. : Semi Variable Resistor
SW. : Switch
Chip R. : Chip Resistor
Chip C. : Chip Capacitor

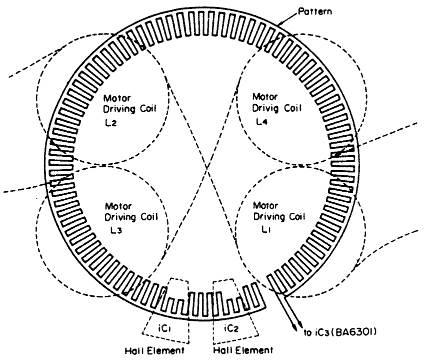
1. BLOCK DIAGRAM


COMPU SELECTOR
fIC2
To DD Motor Contorol Circuit
+5V
SPEED LOCKED Ind.
fQ4
gLD1
+5V REPEAT Ind.
fQ8
gLD2
CPU Ind.
fQ14
33rpm
gLD3
fQ24
+5V 45rpm
gLD4
fQ23
START / STOP
S1
MANUAL
S3
S2
UP/DOWN
S4
REPEAT
S5
CL
CLO
PA0
PA1
PA2
PA3
PC0
PF0
PD3
PF1
PG0
RES
PF2
PC1
PC3
PC2
VGG
PD0
PD1
PD2
PE2
PE3
PE1
PE0
fIC1
µPD0652C
−062
Disc Size Detector
fQ9
fLD4
fQ10
fQ11
fQ12
A Sensor
B Sensor
C Sensor
fLD1
fQ1
fLD2
fQ2
fLD3
fQ3
12V
NORMAL
INVERSE
S6
SPEED
fQ13
fQ5
fQ7
To DD Motor Control Circuit
fQ22
fRL1
PU Output
Plunger Drive Circuit
+20V
fQ19
fQ20
fQ21
fQ18
Lifter Plungur
+15V
fIC3
fIC4
fQ16
fQ17
ARM SERVO
−15V
Arm Servo Sensor
fQ15
fVR1
Arm Servo Adj.

•DD Motor Control Section

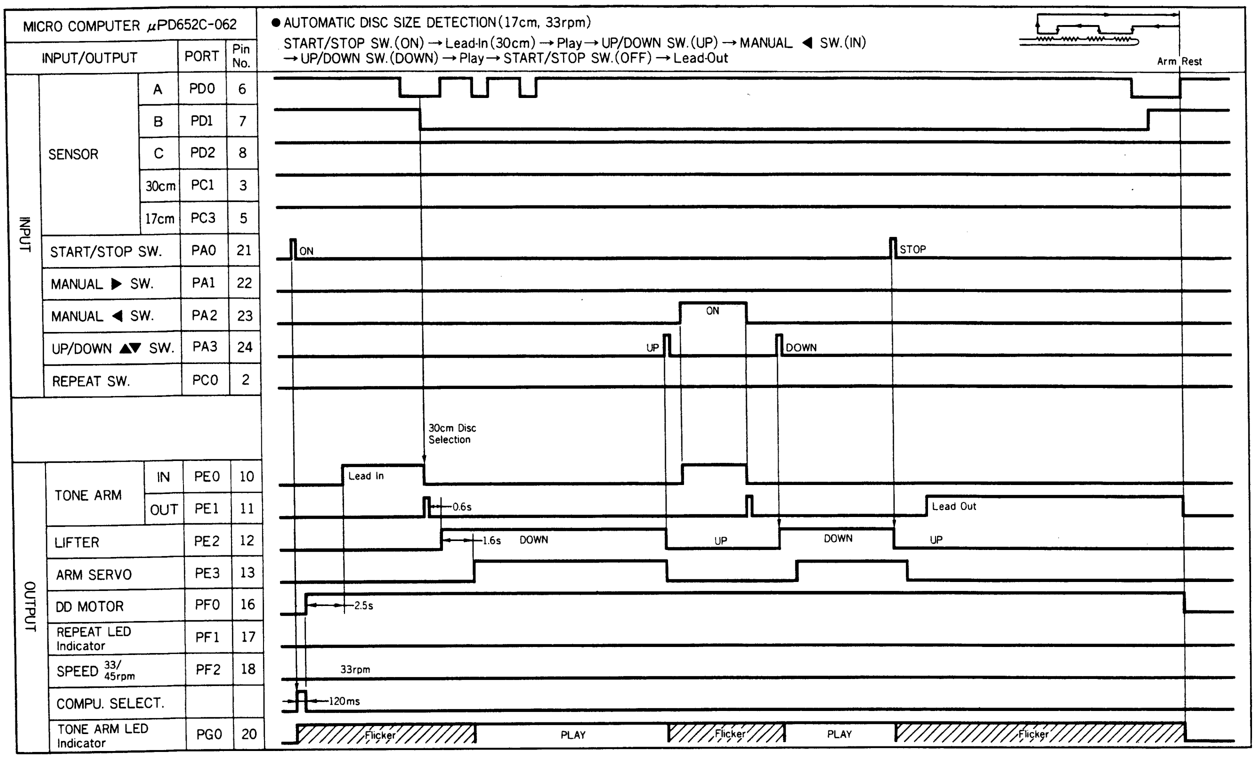

+15V
eQ16
eQ1
eQ2
L1
L2
iC1
DD Motor
eQ5
eQ6
eQ9
eQ10
eVR3
eQ11
eQ12
eQ7
eQ8
DD Motor
iC2
L3
L4
eQ3
eQ4
eQ13
eQ17
eQ14
eQ15
eVR2
eVR1
STOP······H
START······L
FG
(S-0121)
iC3
BA6301
2V
6V
out
DC 4.6V
2V
● BA-6301
MIX Amp.
Sample & Hold
Trian-gular Wave OSC
Buffer
Stop control
Hysteresis Amp.
FG Amp.

Parttern drawing of motor section (S-0121 Motor Control Circuit Board)

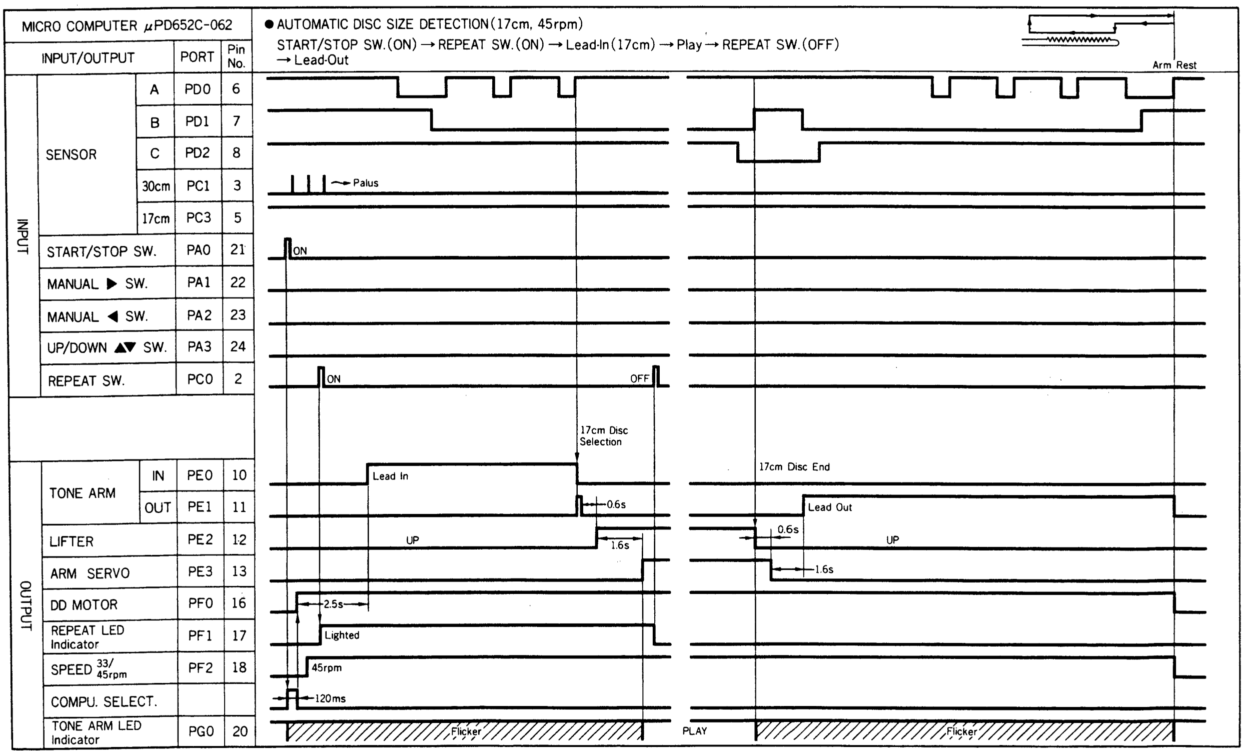

Pattern
Motor Driving Coil L2
Motor Drivig Coil L4
Motor Driving Coil L3
Motor Driving Coil L1
iC1 Hall Element
iC2 Hall Element
to iC3 (BA6301)

2. MICRO COMPUTER, μPD652C-062 TIMING CHART

•Timing Chart 1 AUTOMATIC DISC SIZE DETECTION (30 cm, 33 rpm)


MICRO COMPUTER μPD652C-062
INPUT/OUTPUT
PORT
Pin No.
● AUTOMATIC DISC SIZE DETECTION(17cm, 33rpm)
START/STOP SW.(ON) → Lead-In(30cm) → Play → UP/DOWN SW.(UP) → MANUAL ◀ SW.(IN) → UP/DOWN SW.(DOWN) → Play → START/STOP SW.(OFF) → Lead-Out
Arm Rest
INPUT
SENSOR
A PD0 6
B PD1 7
C PD2 8
30cm PC1 3
17cm PC3 5
START/STOP SW. PA0 21
MANUAL ▶ SW. PA1 22
MANUAL ◀ SW. PA2 23
UP/DOWN ▲▼ SW. PA3 24
REPEAT SW. PC0 2
OUTPUT
TONE ARM
IN PE0 10
OUT PE1 11
LIFTER PE2 12
ARM SERVO PE3 13
DD MOTOR PF0 16
REPEAT LED Indicator PF1 17
SPEED 33/45rpm PF2 18
COMPU. SELECT.
TONE ARM LED Indicator PG0 20
ON
STOP
ON
UP
DOWN
30cm Disc Selection
Lead In
0.6s
Lead Out
1.6s
DOWN
UP
DOWN
UP
2.5s
33rpm
120ms
Flicker
PLAY
Flicker
PLAY
Flicker

•Timing Chart 2 AUTOMATIC DISC SIZE DETECTION (17 cm, 45 rpm)


MICRO COMPUTER μPD652C-062
INPUT/OUTPUT
PORT
Pin No.
● AUTOMATIC DISC SIZE DETECTION(17cm, 45rpm)
START/STOP SW.(ON) → REPEAT SW.(ON) → Lead-In(17cm) → Play → REPEAT SW.(OFF) → Lead-Out
Arm Rest
INPUT
SENSOR
A PD0 6
B PD1 7
C PD2 8
30cm PC1 3
17cm PC3 5
START/STOP SW. PA0 21
MANUAL ▶ SW. PA1 22
MANUAL ◀ SW. PA2 23
UP/DOWN ▲▼ SW. PA3 24
REPEAT SW. PC0 2
OUTPUT
TONE ARM
IN PE0 10
OUT PE1 11
LIFTER PE2 12
ARM SERVO PE3 13
DD MOTOR PF0 16
REPEAT LED Indicator PF1 17
SPEED 33/45rpm PF2 18
COMPU. SELECT.
TONE ARM LED Indicator PG0 20
Palus
ON
ON
OFF
17cm Disc Selection
17cm Disc End
Lead In
0.6s
Lead Out
UP
1.6s
0.6s
UP
1.6s
2.5s
Lighted
45rpm
120ms
Flicker
PLAY
Flicker

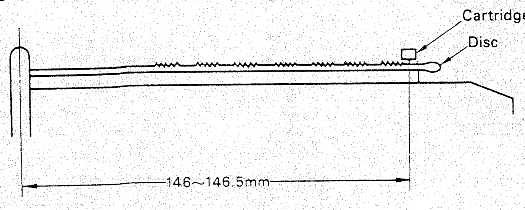
3. ADJUSTMENTS

Note: Before adjustments of 3-1 and 3-2, remove the player case cover only.

3-1. Adjustment of Automatic Disc Size Selection Operation (See Figs. 3-1 and 3-3)

1) By using 30 cm size disc, actually carry out the automatic disc size operation (lead-in operation). Adjust the lead-in adjusting cam (See Fig. 3-3) so that the stylus tip may come down to the position (the lead-in groove position) 146 ~ 146.5 mm away from the disc center (See Fig. 3-1).
2) By using 17 cm size record, actually carry out the automatic disc size operation (lead-in operation). Confirm that the stylus tip may come down to the lead-in groove position.

Fig. 3-1


Cartridge
Disc
146~146.5mm

3-2. Adjustment of Tone Arm Height Operation (See Figs. 3-2 (a), (b) and 3-3)

- **Required disc and measuring instruments**

1) Tester (DC voltmeter)
Input impedance: 50kohm/V or more. (The higher, the better)
2) A vinyl chloride record disc without grooves or with wider leadout spiral than usual.
3) A rule with graduation marks starting from the edge.

- **Adjustment**

Adjust the height as shown in Fig. 3-2 (a), (b) by rotating the tone arm height adjusting screw (See Fig. 3-3). (Stop the stylus at a position about 110 mm away from the disc center.)

Fig.3-2(a)

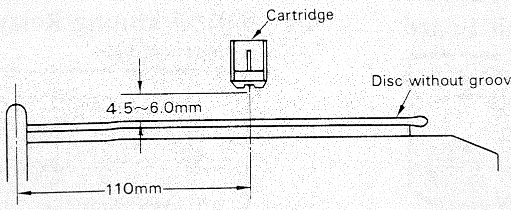

Cartridge
Disc without grooves
4.5~6.0mm
110mm

Fig.3-2(b)

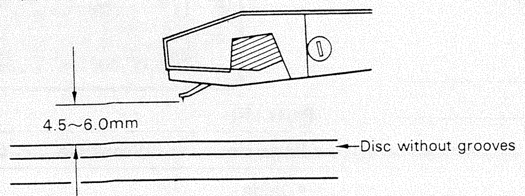
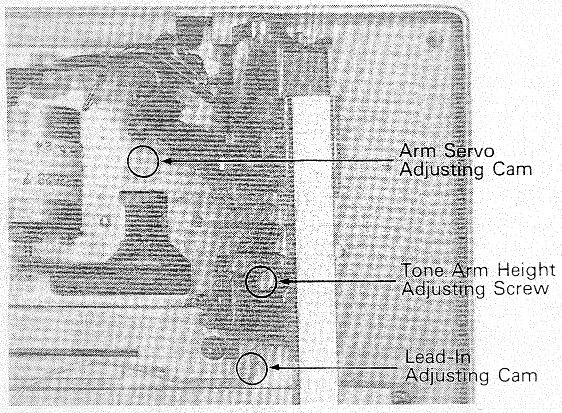

4.5~6.0mm
Disc without grooves

Fig. 3-3

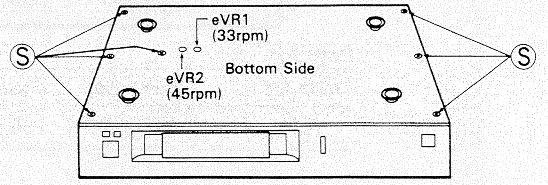

Arm Servo Adjusting Cam
Tone Arm Height Adjusting Screw
Lead-In Adjusting Cam

3-3. Speed Adjustment

1-a) Set the Speed Selector to Normal.
1-b) Mount a 30 cm size record disc and push the start/stop switch.
1-c) Adjust eVR1 on the D.D. Motor Control Circuit Board (See Fig. 3-10) so as to standstill the strobo marking pattern.
2-a) Set the Speed Selector to Normal.
2-b) Mount a 17 cm size record disc and push the start/stop switch.
2-c) Adjust eVR2 on the D.D. Motor Control Circuit Board (See Fig. 3-4) so as to standstill the strobo marking pattern.

- Set eVR3 (S-0121) center position.

Fig. 3-4


eVR1
(33rpm)
eVR2
(45rpm)
Bottom Side
S
S

Note: Remove the cabinet before adjustment of 3-4.

- **How to remove the cabinet.** (See Top View on page 8)

1) Take off turntable sheet and turntable platter.
2) Remove the play case cover.
3) Loosen 7 screws Ⓢ to remove cabinet. (See Fig. 3-4)
4) Remove the cabinet upward slowly.

Note: Do not strike tone arm with the cabinet.

3-4. Arm Servo Signal Adjustment

(See Figs. 3-3, 3-5, 3-6 and 3-7)

1) Move the tone arm leftward and stop the stylus at a position about 105 mm away from the disc center by depressing the MANUAL (◄) key.
2) Connect the DC voltmeter across the test terminal "TR" and "G" shown in Fig. 3-6.
3) The tone arm servo level goes up more when the tone arm is moved rightward slightly by hand.
4) Adjust the voltage of "item 3)" to DC 4V by rotating the volume (fVR1).
5) Move the tone arm downward by depressing UP/DOWN key.
6) Rotate the arm servo adjusting cam slowly clockwise just right before the tone arm starts moving outwards, then read the indication on DC voltmeter.
7) Next, rotate the arm servo adjusting cam slowly counterclockwise just right before the tone arm starts moving inwards, then read the indication as well.
8) Set the fixed value to average voltage between two indications obtained in 6) and 7) above, by rotating (fVR1).
9) Connect the DC voltmeter across the terminal "M" and "G" (See Fig. 3-7) and then confirm that the voltage is within ±1V.
10) Check that the tone arm will not move in either direction when the UP/DOWN key is depressed repeatedly, if necessary, rotating the volume (fVR1) slightly.

Fig. 3-5

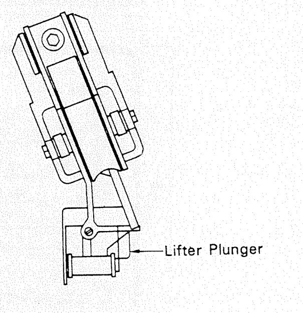

Lifter Plunger

Fig. 3-6

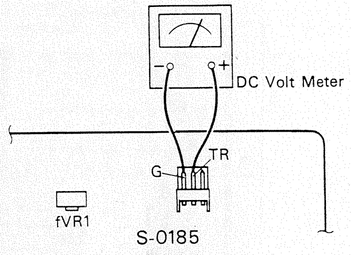
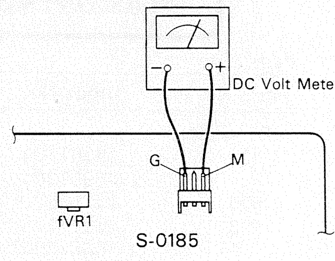

DC Volt Meter
TR
G
fVR1
S-0185

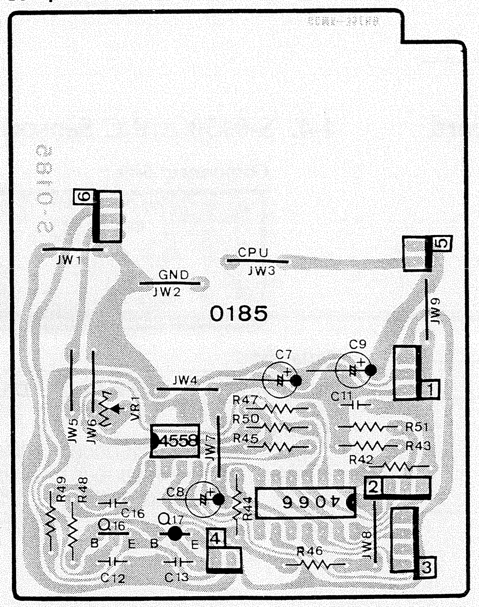
Fig. 3-7


DC Volt Meter
G
M
fVR1
S-0185

4. PARTS LOCATION & PARTS LIST

4-1. S-0185 T.A. Control (Sub) Circuit Board (Stock No. 13257201)

Component Side

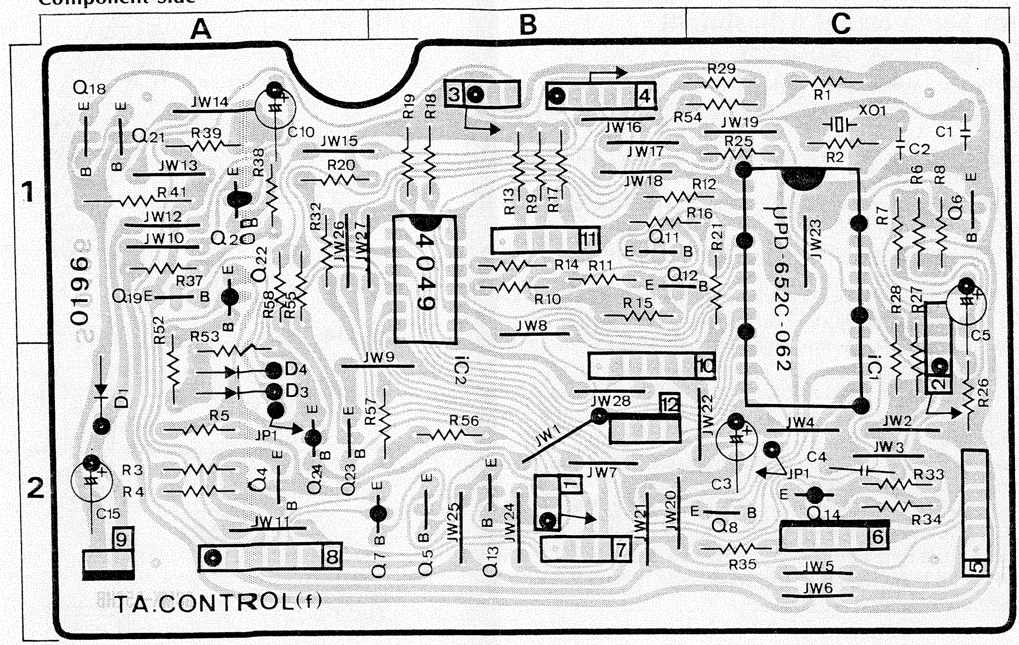

0185
CPU
JW3
GND
JW2
JW1
JW4
JW5
JW6
JW7
JW8
VR1
4558
C7
C8
C9
C11
C12
C13
C16
Q16
Q17
R42
R43
R44
R45
R46
R47
R48
R49
R50
R51
9904
1
2
3
4
5
6

Parts List

Parts No.	Stock No.	Description
•Transistor		
fQ16	46614101	2SC3243
fQ17	46614001	2SA1283
•IC		
fIC3	07264600	MSM4066RS
	or 46164300	MB84066B
fIC4	03607700	NJM4558D
	or 46580100	M5218P
fVR1	46180100	10kΩ(B) S.V.R., arm servo adj.

4-2. S-0196 T.A. Control (Main) Circuit Board (Stock No. 13250301)

Component Side

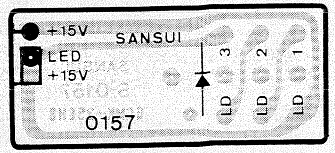

A
B
C
1
2
0196
TA.CONTROL(f)
4049
UPD 652C-062
iC1
iC2

Parts List

Parts No.	Stock No.	Description
•Transistor		
fQ4	46367101	2SC2603
	or 46367301	2SC2458
fQ5	46719900	DTC124
fQ6	46367101	2SC2603
	or 46367301	2SC2458
fQ7	46719800	DTA124
fQ8	46719900	DTC124
fQ11	46367101	2SC2603
	or 46367301	2SC2458
fQ12	46367101	2SC2603
	or 46367301	2SC2458
fQ13	46719900	DTC124
fQ14	46367001	2SA1115
	or 46367201	2SA1048
fQ18	46614101	2SC3243
fQ19	46719900	DTC124
fQ20	46614001	2SA1283
fQ21	46719900	DTC124
fQ22	46367001	2SA1115
	or 46367201	2SA1048
fQ23	46719900	DTC124
fQ24	46367001	2SA1115
	or 46367201	2SA1048
•IC		
fIC1	46610300	μPD652C-062
fIC2	03611800	MSM4049RS
	or 46160400	MB84049B
fXD1	46396200	CSB400P
	or 46668700	KBR-400B
•Diode		
fD1	03117600	1S2473T77
fD3	03117600	1S2473T77
fD4	03117600	1S2473T77
⚠ fR41	46624400	120Ω 2W N.I.R.

4-3. S-0157 A,B,C Sensor (L.E.D.) Circuit Board

Component Side

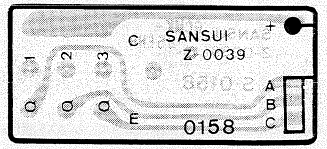

+15V
SANSUI
LED
+15V
0157
3
2
1
LD
LD
LD

Parts List

Parts No.	Stock No.	Description
•LED		
fLD1	46150400	TLR121
fLD2	46150400	TLR121
fLD3	46150400	TLR121

4-4. S-0158 A,B,C Sensor (Photo Transistor) Circuit Board

Component Side

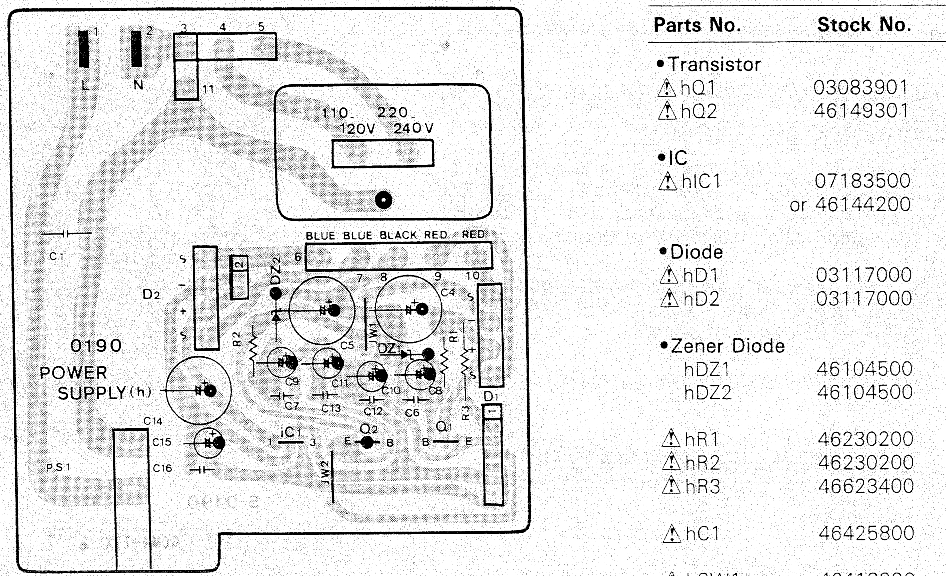

C
SANSUI
Z-0039
1
2
3
E
0158
A
B
C

Parts List

Parts No.	Stock No.	Description
•Photo Transistor		
fQ1	46160000	TPS605
fQ2	46160000	TPS605
fQ3	46160000	TPS605

4-5. S-0190 Power Supply Circuit Board

Component Side

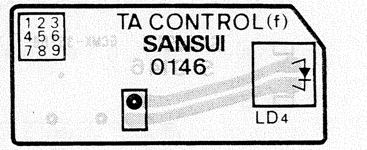

L
N
110. 220.
120V 240V
BLUE BLUE BLACK RED RED
0190
POWER
SUPPLY(h)
C1
D2
PS1
iC1
Q1
Q2

Parts List

Parts No.	Stock No.	Description
•Transistor		
⚠ hQ1	03083901	2SD313AL
⚠ hQ2	46149301	2SB744
•IC		
⚠ hIC1	07183500	μPC78M05H
	or 46144200	NJM78M05A
•Diode		
⚠ hD1	03117000	RB-152
⚠ hD2	03117000	RB-152
•Zener Diode		
hDZ1	46104500	05Z16-X
hDZ2	46104500	05Z16-X
⚠ hR1	46230200	1kΩ 1/2W N.I.R.
⚠ hR2	46230200	1kΩ 1/2W N.I.R.
⚠ hR3	46623400	18Ω 2W N.I.R.
⚠ hC1	46425800	0.01μF 400V C.C.
⚠ hSW1	46413900	Push SW., POWER

4-6. S-0146 Disc Size Sensor (L.E.D) Circuit Board

Component Side

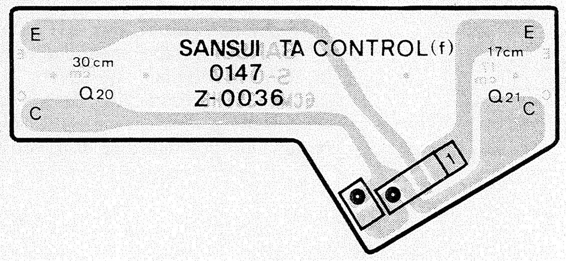

TA CONTROL(f)
SANSUI
0146
LD4

Parts List

Parts No.	Stock No.	Description
fLD4	46396000	LED GL-520

4-7. S-0147 Disc Size Sensor (Photo Transistor) Circuit Board

Component Side

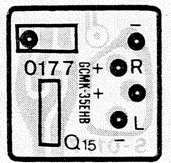

E
30cm
Q20
C
SANSUI TA CONTROL(f)
0147
Z-0036
17cm
E
Q21
C

Parts List

Parts No.	Stock No.	Description
•Photo Transistor		
fQ9	03900100	PH101
fQ10	03900100	PH101

4-8. S-0177 Arm Servo Sensor Circuit Board

Component Side

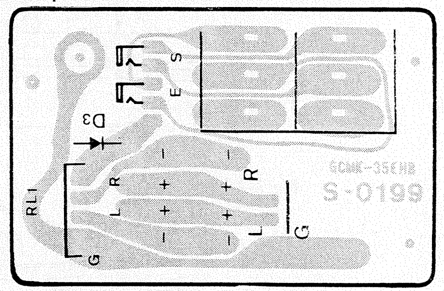


Parts List

Parts No.	Stock No.	Description
fQ15	46603900	Photo Coupler GP-1S03

4-9. S-0199 Muting Relay Circuit Board

Component Side

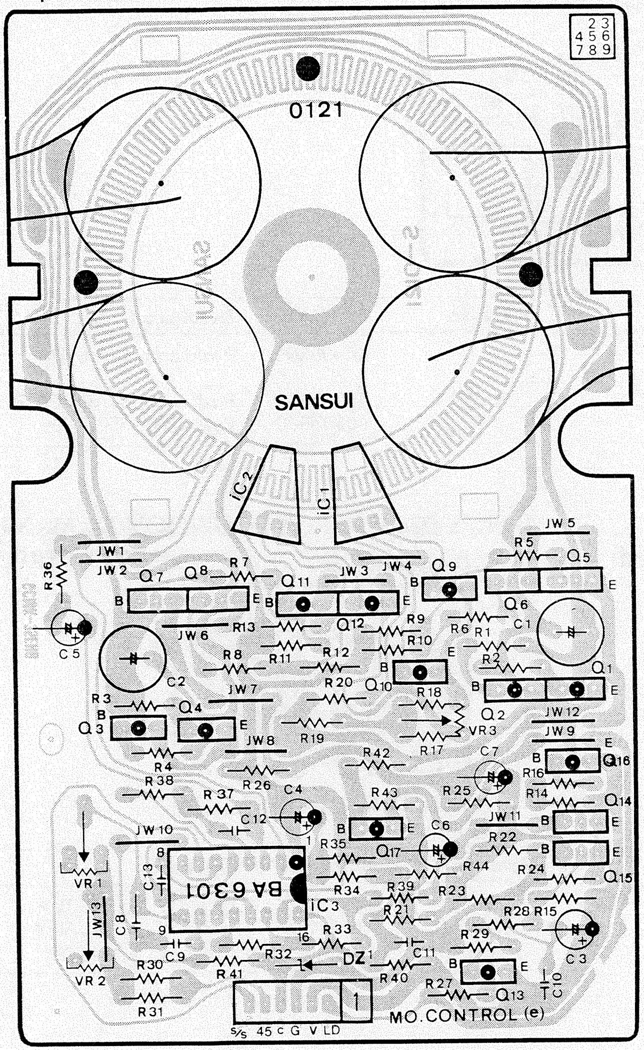

D3
RL1
S-0199
R
L
G

Parts List

Parts No.	Stock No.	Description
•Diode		
fD3	07176400	1S2473HS
fRL1	46173300	Relay
	46148200	Jack, COMPU SELECTOR, COMPU EDIT

4-10. S-0121 DD Motor Control Circuit Board

Component Side

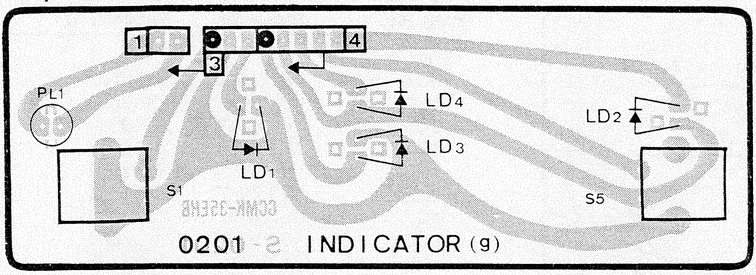

2 3
4 5 6
7 8 9
0121
SANSUI
IC2
IC1
JW1
JW2
JW3
JW4
JW5
JW6
JW7
JW8
JW9
JW10
JW11
JW12
JW13
R36
Q7
Q8
R7
Q11
Q9
R5
Q5
Q6
C1
C5
R13
Q12
R9
R6
R1
R8
R11
R12
R10
R2
Q1
C2
R20
Q10
R18
R3
Q4
Q3
Q2
VR3
R19
R42
R17
C7
Q16
R4
R38
R37
R26
C4
R43
R25
R16
R14
Q14
C12
C6
R35
Q17
R22
VR1
C13
BA6301
R44
R24
Q15
R34
R39
R23
IC3
R21
R28
R15
C8
R33
R29
C3
VR2
R30
C9
R32
DZ1
C11
R41
R40
R27
Q13
C10
R31
MO.CONTROL (e)
S/S 45 C G V LD

Parts List

Parts No.	Stock No.	Description
•Transistor		
eQ1	46359701	2SA952
eQ2	46359701	2SA952
eQ3	46359701	2SA952
eQ4	46359701	2SA952
eQ5	46359801	2SC2001
eQ6	46359801	2SC2001
eQ7	46359801	2SC2001
eQ8	46359801	2SC2001
eQ9	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
eQ10	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
eQ11	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
eQ12	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
eQ13	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
eQ14	46367101	2SC2603
	or 46367301	2SC2458
	or 46367501	2SC945A
eQ15	46367101	2SC2603
	or 46367301	2SC2458
	or 46367501	2SC945A
eQ16	46614001	2SA1283
eQ17	46367001	2SA1115
	or 46367201	2SA1048
	or 46367401	2SA733A
•IC		
eIC1	46354301	HW-301C-Q
	or 46354302	HW-301C-R
eIC2	46354301	HW-301C-Q
	or 46354302	HW-301C-R
eIC3	46354400	BA6301
•Zener Diode		
eDZ1	46113900	05Z12-Y
eR41	46639000	240kΩ 1/4W M.R.
eC1	08451100	22μF 16V E.B.
eC2	08451100	22μF 16V E.B.
eVR1	46366600	100kΩ(B) S.V.R., 33r.p.m.
eVR2	07241700	200kΩ(B) S.V.R., 45r.p.m.
eVR3	07241000	1kΩ(B) S.V.R., wow and flatter

4-11. S-0201 START/STOP, REPEAT Switch and Indicator Circuit Board

Component Side

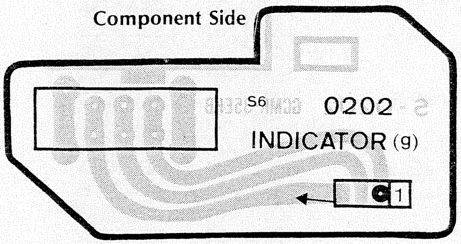

1
3
4
PL1
LD4
LD3
LD1
LD2
S1
S5
0201
INDICATOR (g)

Parts List

Parts No.	Stock No.	Description
•Diode		
gLD1	07250900	TLG-123A
gLD2	46095200	TLR123
gLD3	46095200	TLR123
gLD4	46095200	TLR123
	46438300	Pilot Lamp 12V 0.1A
gSW1	46395900	Push SW., START/STOP
gSW5	46395900	Push SW., REPEAT

4-12. S-0202 NORMAL/INVERSE Switch Circuit Board

Component Side

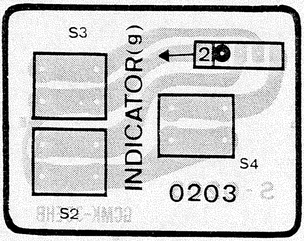

S6
0202
INDICATOR (g)
1

Parts List

Parts No.	Stock No.	Description
gSW6	07249800	Slide SW.

4-13. S-0203 Tone Arm UP/DOWN, MANUAL Switch Circuit Board

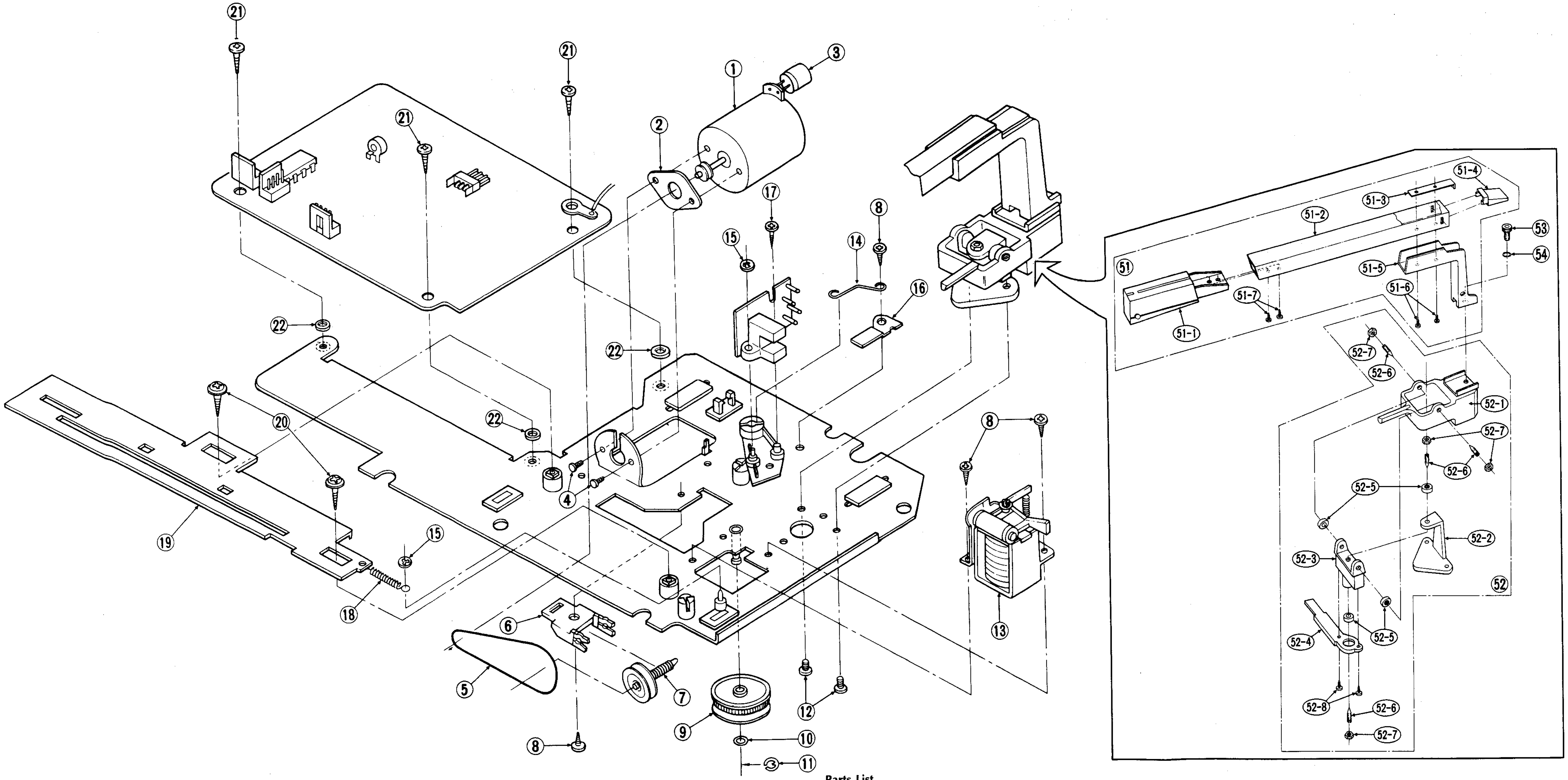
Component Side


S3
INDICATOR(g)
2
S4
0203
S2

Parts List

Parts No.	Stock No.	Description
gSW2	46371600	Push SW., MANUAL ►
gSW3	46371600	Push SW., MANUAL ◄
gSW4	46371600	Push SW., UP/DOWN

5. EXPLODED VIEW OF AUTO MECHANISM & PARTS LIST


21
21
21
3
1
2
17
8
15
14
16
51-4
51-3
51-2
53
54
51
51-5
51-6
51-7
51-1
22
22
22
52-7
52-6
52-1
52-7
20
52-6
8
52-5
19
15
4
52-2
52-3
18
52
6
13
52-4
52-5
7
5
12
52-8
52-6
9
52-7
8
10
11

Parts List

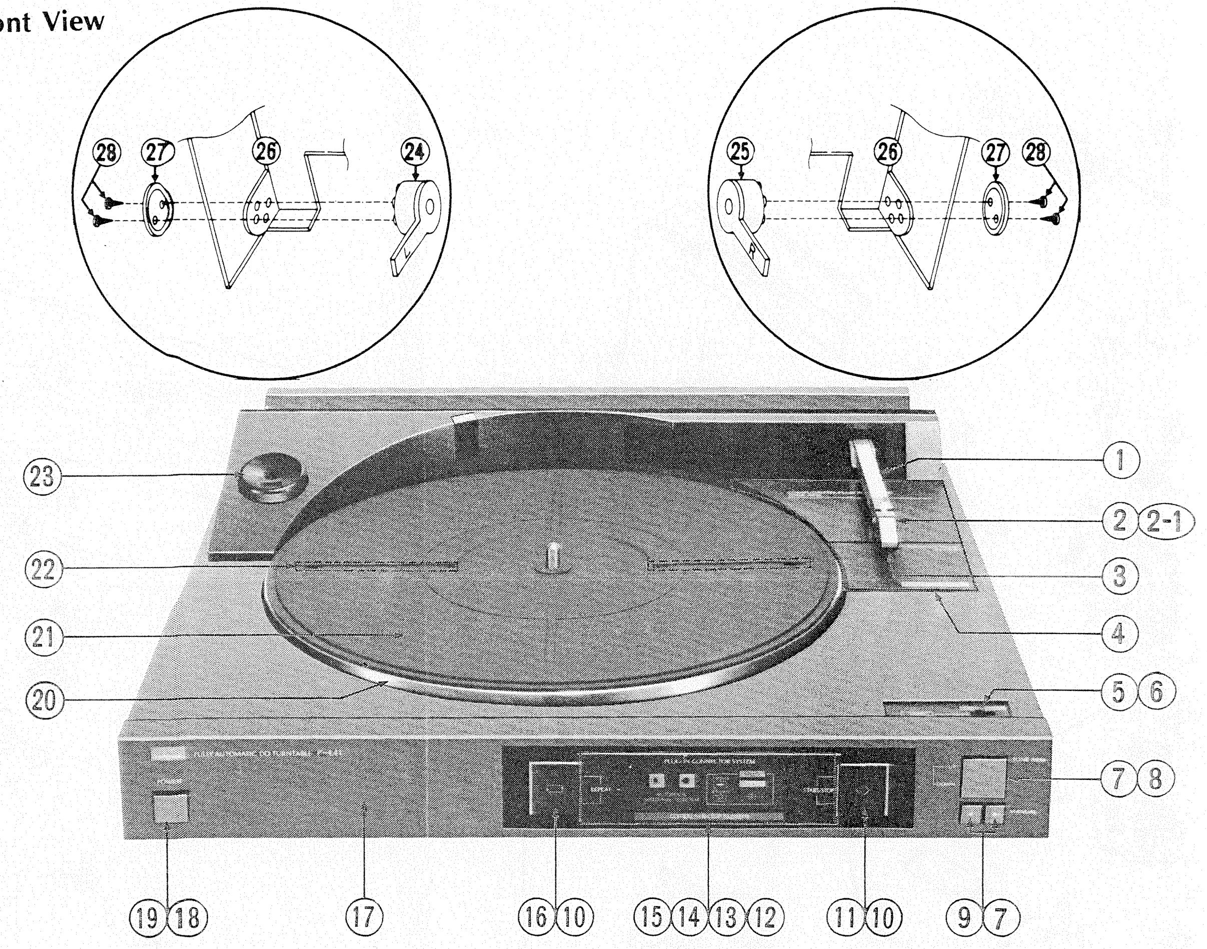
Parts No.	Stock No.	Description
1	13217500	DC Motor
2	55029810	Rubber Cushion
3	00305600	22μF 25V E.B.
4	00436500	M4×2 Pan Head Screw
5	13103800	Belt
6	13098110	Shaft Guide (B)
7	13134200	Warm Shaft Ass'y (B)
8	00454400	M3×6 Binding Head Tapping Screw
9	13215810	Drive Gear
10	51825300	FT3 Thrust Washer
11	00489000	D2 E. Ring
12	00421900	M3×6 Binding Head Screw
13	13216100	Plunger Solenoid Ass'y
14	13229600	Torsion Spring
15	51830000	CS-Type Washer
16	13239200	Protector Plate
17	13226100	M2×4 Binding Head Tapping Screw
18	13111500	Tension Spring (2)
19	13241700	Position Guide
20	51625100	M3×8 Pan Head Tapping Screw
21	00454500	M3×8 Binding Head Tapping Screw
22	13226000	M9 Isolation Washer

Parts List

Parts No.	Stock No.	Description
51	18084100	Tone Arm Ass'y
51-1	—	Plug Ass'y
51-2	—	Pipe
51-3	—	GND Rag
51-4	—	Pipe Cover
51-5	—	Pipe Holder
51-6	—	M2×4 Pan Head Screw
51-7	—	M2×4 Pan Head Tapping Screw
52	18075200	Pivot Ass'y
52-1	—	Arm Bracket
52-2	—	Pivot Stay
52-3	—	Pivot Holder
52-4	—	Servo Plate
52-5	—	Pivot Bearing
52-6	—	Pivot
52-7	—	M3 Hexagon Nut
52-8	—	M2×6 Pan Head Tapping Screw
53	00453500	M4×8 Hexagon Socket Head Screw
54	00469800	D4 Spring Washer

6. OTHER PARTS

6-1. Front View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②②-1
③
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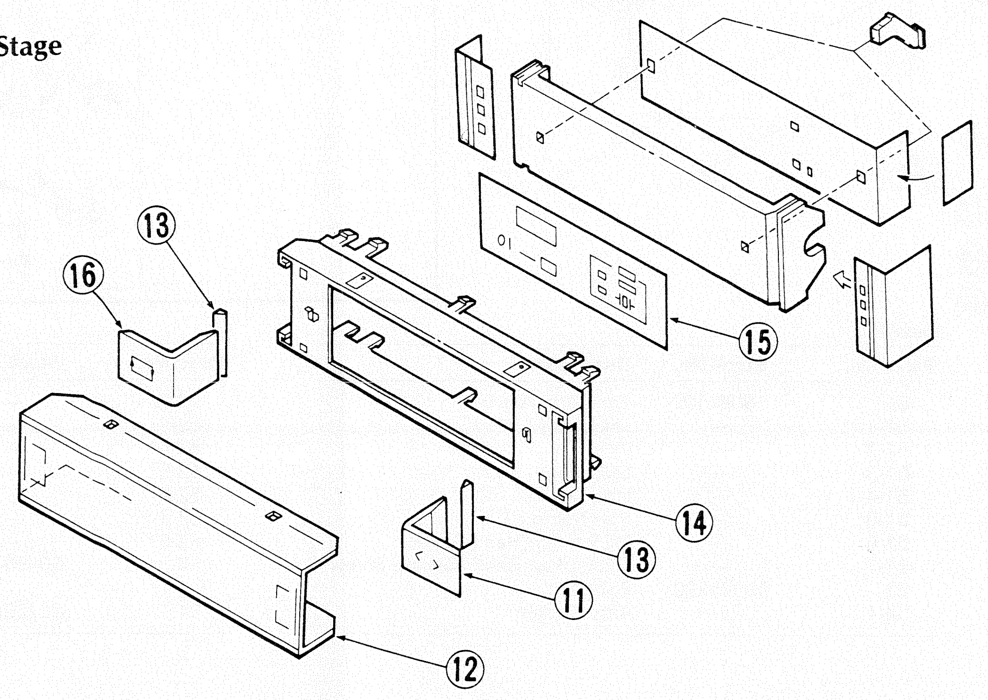
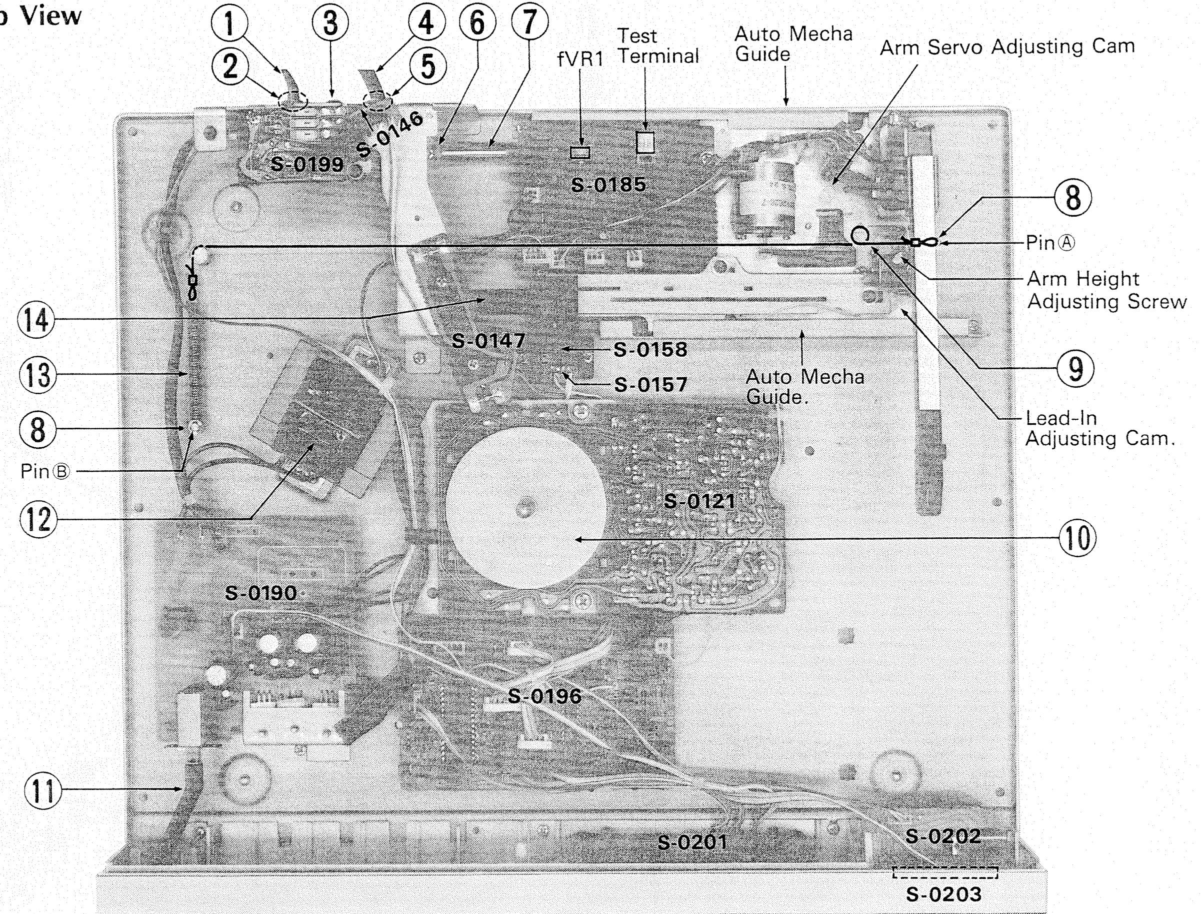
⑤⑥
⑦⑧
⑲⑱
⑰
⑯⑩
⑮⑭⑬⑫
⑪⑩
⑨⑦

6-2. Display Stage



6-3. Top View


①
②
③
④
⑤
⑥
⑦
fVR1
Test Terminal
Auto Mecha Guide
Arm Servo Adjusting Cam
S-0199
S-0146
S-0185
⑧
Pin Ⓐ
Arm Height Adjusting Screw
⑭
S-0147
S-0158
S-0157
Auto Mecha Guide.
⑨
⑬
Lead-In Adjusting Cam.
⑧
Pin Ⓑ
S-0121
⑫
⑩
S-0190
S-0196
⑪
S-0201
S-0202
S-0203

Parts List <Front View, Display Stage>

Parts No.	Stock No.	Description
1	18084100	Tone Arm Ass'y
2	13231800	SV-P515 Cartridge Ass'y
2-1	13233500	Cartridge Fixing Screw Ass'y (Including Screw and Nut)
3	13231900	SN-P515 Stylus
4	13255400	Player Case Cover (Silver Model)
	13255300	Player Case Cover (Black Model)
5	07249800	Slide SW., NORMAL/INVERSE
6	13141600	Slide Knob, NORMAL/INVERSE
7	46371600	Push SW., UP/DOWN, MANUAL
8	13139800	Push Knob, UP/DOWN
9	13259200	Push Knob, MANUAL ◄►
10	46395900	Push SW., START/STOP, REPEAT
11	47438600	Push Knob, START/STOP
12	13252900	Display Cover
13	07962610	Rubber Cushion
14	13145810	Display Holder
15	13252800	Display Plate
16	47438500	Push Knob, REPEAT
17	13247200	Front Panel Ass'y (Silver Model)
	13247300	Front Panel Ass'y (Black Model)
⚠ 18	46413900	Push SW., POWER
19	07971210	Push Knob, POWER (Silver Model)
	07911210	Push Knob, POWER (Black Model)
20	13143810	Turntable Platter
21	13146700	Turntable Sheet <XX, CSA, EU, BS, AS>
	13146800	Turntable Sheet <UL>
22	13037900	Prism, dick size detector
23	13012300	EP Adaptor
24	13187200	Side Hinge (L)
25	13187300	Side Hinge (R)
26	13247600	Dust Cover Ass'y (Silver Model)
	13247700	Dust Cover Ass'y (Black Model)
27	13113800	Hinge Cap (Silver Model)
	13187400	Hinge Cap (Black Model)
28	13115100	M2.6×8 Screw (Silver Model)
	13187500	M2.6×8 Screw (Black Model)
	13145100	Insulator

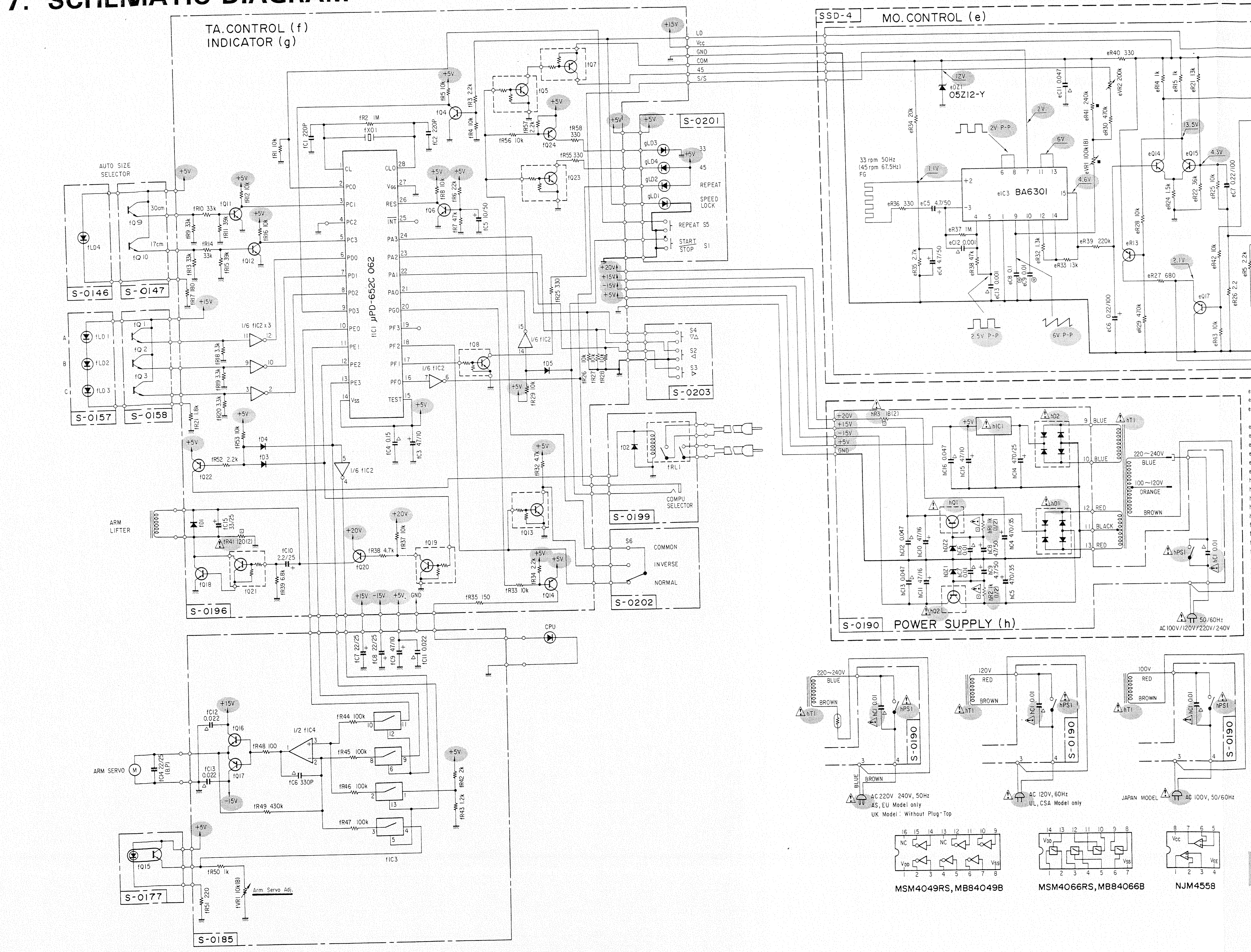
Parts List <Top View>

Parts No.	Stock No.	Description
⚠ 1	46413200	Power Supply Cord <XX, CSA>
⚠	38004700	Power Supply Cord <UL>
⚠	38004500	Power Supply Cord <EU>
⚠	38004300	Power Supply Cord <BS>
⚠	07204200	Power Supply Cord <AS>
2	39106000	Strain Relief <XX, UL, CSA>
	39104900	Strain Relief <EU, BS, AS>
3	46148200	Jack, COMPU SELECTOR
4	13222400	PU Output Cord <XX, CSA, EU, BS, AS>
	13222500	PU Output Cord <UL>
5	39104900	Strain Relief
6	13106200	Pipe Holder
7	13106000	Pipe
8	00489200	E-ring 3ø
9	13215810	Drive Wire
10	18032300	DD Motor with Control Circuit Board S-0121
11	47113100	Joint Shaft
⚠ 12	15008301	Power Transformer <XX>
⚠	15008312	Power Transformer <UL, CSA>
⚠	15008315	Power Transformer <EU, BS, AS>
13	13220500	Tension Spring
14	13241600	Angle Rail

A B C D E F G H

7. SCHEMATIC DIAGRAM

*Design and specifications subject to change without notice for improvement.
*La présentation et les spécifications sont susceptibles d'êter modifiées sans préavis par suites d'améliorations éwventuelles.
*Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.


TA.CONTROL (f)
INDICATOR (g)
AUTO SIZE SELECTOR
ARM LIFTER
ARM SERVO
Arm Servo Adj.
CPU
fIC1 μPD652C 062
S-0146
S-0147
S-0157
S-0158
S-0196
S-0177
S-0185
S-0201
S-0203
S-0199
S-0202
REPEAT
SPEED LOCK
REPEAT S5
START STOP S1
COMPU SELECTOR
COMMON
INVERSE
NORMAL
SSD-4
MO.CONTROL (e)
S-0121
eIC3 BA6301
33 rpm 50Hz
45 rpm 67.5Hz
FG
eIC1,2 H300-BC
S-0190
POWER SUPPLY (h)
AC 220V 240V, 50Hz
AS, EU Model only
UK Model : Without Plug-Top
AC 120V, 60Hz
UL, CSA Model only
JAPAN MODEL
AC 100V, 50/60Hz
AC 100V/120V/220V/240V
MSM4049RS, MB84049B
MSM4066RS, MB84066B
NJM4558

eQ1,2,3,4	2SA952(M,L)
eQ5,6,7,8	2SC2001(M,L)
eQ9,10,11,12	2SA733A(Q,P),2SA1115(E,F) 2SA1048(Y,GR)
eQ13,17	2SA733AP, 2SA1115, 2SA1048GR
eQ14,15	2SC945AP, 2SC2603, 2SC2458GR
eQ16	2SB744(P)
eIC1,2	H-301 BC (GOLD, SILVER)
eIC3	BA6301
eDZ1	05Z12-Y
hQ1	2SD313AL(E,F)
hQ2	2SB744(Q,P)
hIC1	μPC78M05H, NJM7805A
hD1,2	RB152
hDZ1,2	05Z16-X
fQ1,2,3	TPS605
fQ4,6,11,12,13	2SC2603(E,F),2SC2458(Y,GR)
fQ14,17,22	2SA1115(E,F), 2SA1048(Y,GR)
fQ9,10	PH101
fQ15	GP-1S03
fQ16	2SC3243(D,E)
fQ17	2SA1283(D,E)
fQ18	2SD1226(Q,P)
fQ20	2SB910M(Q,R)
fQ5,8,19,21	DTC124
fQ7	DTA124
fIC1	μPD652C-062
fIC2	MSM4049RS, MB84049B
fIC3	MSM400RS, MB84066B
fIC4	NJM4558D, M5218P
fLD1,2,3	TLR-121
fLD4	GL-520
fD1,2,3,4,5	1S2473D
gLD1	TLG-123
gLD2,3,4	TLR-123

SYMBOL OF FUNCTION

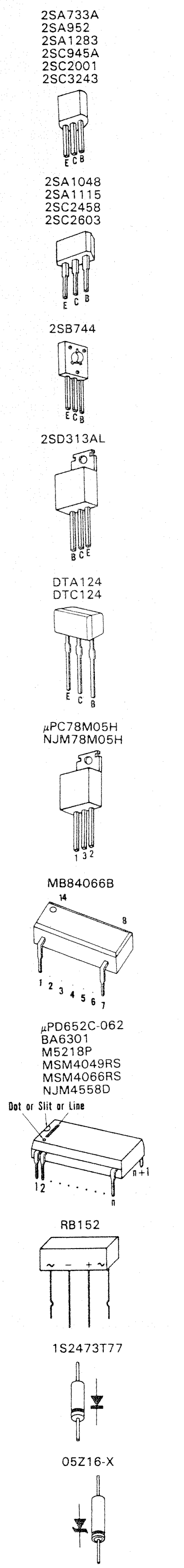
(e) MO.CONTROL
(f) TONE ARM CONTROL
(g) INDICATOR
(h) POWER SUPPLY
(f) TA.CONTROL

SYMBOL

△	Ceramic Capacitor
B.P	Bi-Polar Electrolytic
◎	Film Capacitor
⊡	Non-Inflammable Resistor
■	Metal Film Resistor

⚠ is Safety Part.
Use only replacement parts recommended by the manufacturer.

RESISTORS
Are in ohms, 1/4 Watts, ±5% Tolerance Unless Otherwise Noted. k: kΩ, M: MΩ
CAPACITORS
Are in μF, Unless Otherwise Noted. P: pF
TOLERANCE
J: ±5%, G: ±2%, F: ±1%
Electrolytic Capacitor:
Capacitance (μF) / Volt (V)


2SA733A
2SA952
2SA1283
2SC945A
2SC2001
2SC3243
E C B
2SA1048
2SA1115
2SC2458
2SC2603
E C B
2SB744
E C B
2SD313AL
B C E
DTA124
DTC124
E C B
μPC78M05H
NJM78M05H
1 3 2
MB84066B
14
8
1 2 3 4 5 6 7
μPD652C-062
BA6301
M5218P
MSM4049RS
MSM4066RS
NJM4558D
Dot or Slit or Line
1 2
n+1
n
RB152
~ − + ~
1S2473T77
05Z16-X

1
2
3
4
5

8. MAIN PARTS REPLACEMENT

(See Top View on page 9 and Exploded View of Mechanism on page 8)

8-1. Replacement of Mechanism Assembly

1) Take off turntable sheet and turntable platter.
2) Remove the player case cover.
3) Loosen 7 screws Ⓢ (See Fig. 3-3 on page 3)
4) Move the tone arm and stop the stylus at a position about 10 cm away from the disc center.
5) Remove the cabinet upward slowly.
6) Remove the auto mecha. guide. (See Top View on page 9)
7) Remove the wire from pin Ⓑ. (See Top View on page 9)
8) Take off the wire from the driving gear ⑨.

8-2. Replacement of Pivot Ass'y (52)

1) Perform the items 1), 2), 3) and 4) "8-1. Replacement of Mechanism Ass'y" first.
2) Loosen the hexagon socket head screw (53) to remove the tone arm ass'y (51).
3) Perform the items 6), 7) and 8) "8-1. Replacement of Mechanism Ass'y."
4) Remove two screws ⑫ fixing the pivot ass'y under the mechanism chassis.
5) Take off the pivot ass'y from the mechanism ass'y.

8-3. Note on Parts Replacement

1) When replacing the shaft guide (B) ⑥, the warm gear ass'y (B) ⑦ and the driving gear ⑨, remove under the mechanism chassis.
2) When installing the wire, wind round the drive gear and fit the pin Ⓐ as shown in Fig. 8-1.
3) Refer to Fig. 8-2, when wiring from cartridge (tone arm ass'y (51)).
4) Perform adjustments 3-1, 3-2 and 3-4, when replacing a parts of the mechanism ass'y.

Fig. 8-1

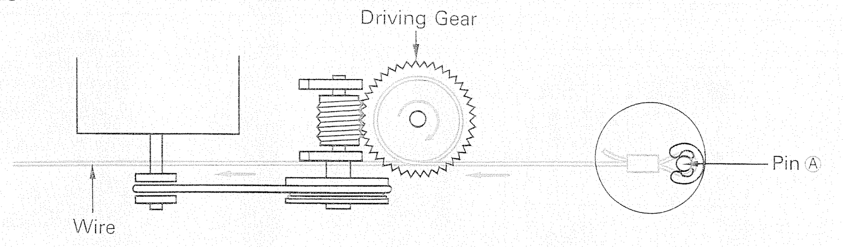
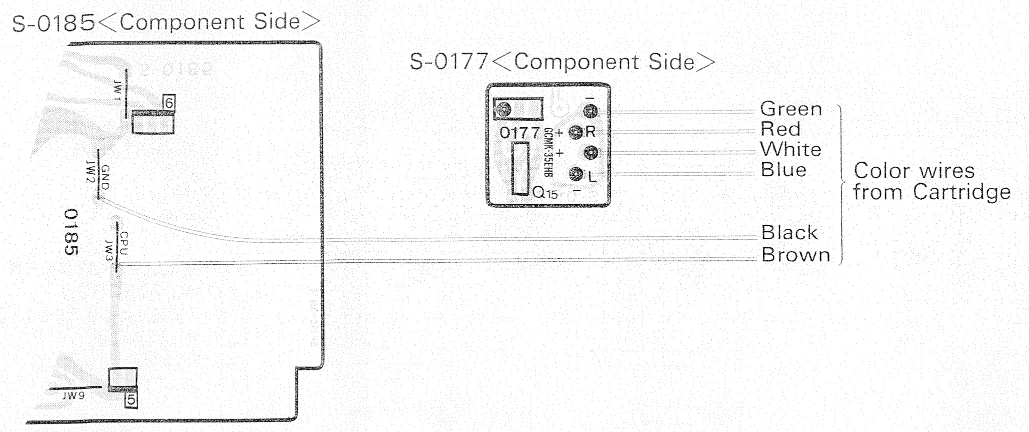


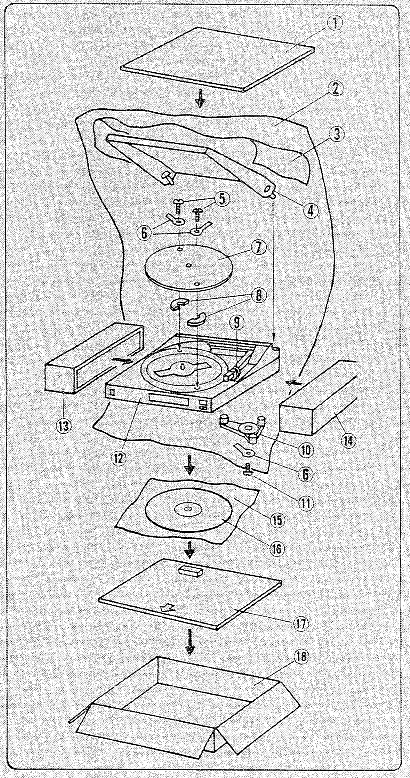
Fig. 8-2



9. PACKING LIST

Parts No.	Stock No.	Description
1	—	Corrugated Board
2	91166000	Vinyl Bag
3	—	Cover
4	13247600	Dust Cover Ass'y (Silver Model)
	13247700	Dust Cover Ass'y (Black Model)
5	13186800	M4×25 Tapping Screw
6	51829200	Tag Washer
7	13143810	Turntable Platter
8	13163210	Spacer
9	—	Binder
10	13220610	Protector
11	00449700	M4×12 Pan head SEMS Screw
12	—	Unit
13	13174800	Styrofoam Packing (Left)
14	13174900	Styrofoam Packing (Right)
15	91166000	Vinyl Bag
16	13146700	Turntable Sheet <XX, CSA, EU, BS, AS>
	13146800	Turntable Sheet <UL>
17	—	Corrugated Board
18	13245500	Carton Case <P-L41 (Silver Model)>
	13245600	Carton Case <P-L41 (Black Model)>
	13245700	Carton Case <P-L41M (Silver Model)>
	13245800	Carton Case <P-L41M (Black Model)>

•**Note:** There are two types of unit in P-L41.
1) The unit with a Dust Cover Ass'y.
2) The unit without a Dust Cover Ass'y.
("M" mark is indicated on the Carton Case).



10. ACCESSORY LIST

Stock No.	Description
46920600	Operating Instruction
46933100	Operating Sheet
46267300	Mini Plug Cord, COMPU SELECTOR

Sansui
SANSUI ELECTRIC CO., LTD.: 14-1, Izumi 2-chome, Suginami-ku, Tokyo 168 Japan
PHONE: (03) 324-8891/TELEX: 232-2076 (International Division)
SANSUI ELECTRONICS CORPORATION: 1250 Valley Brook Ave. Lyndhurst, N.J. 07071 U.S.A.
17150 South Margay Ave. Carson, California 90746 U.S.A.
3036 Koapaka Street. Honolulu, Hawaii 96819 U.S.A.
SANSUI ELECTRONICS (U.K.) LTD.: Unit 10A, Lyon Industrial Estate, Rockware Avenue, Geenford, Middx UB6, OAA, England
SANSUI ELECTRONICS G.M.B.H.: Pau Ehrich Strasse 8, 6074 Rödermark 2, West Germany

(SM1-131) Printed in Japan (145420M) <Stock No. 36489000>